Remarks

Reconsideration of this Application is respectfully requested.

Claims 146-148, 150-174, 176, 177, 180-203, 233 and 237-244 are pending in the application, with claims 146-148, 176, 177, and 233 being the independent claims.

Based on the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

I. The Rejections

A. First Rejection Under 35 U.S.C. § 102(b)

Claims 146, 150, 168-169, 233, 241, and 242 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Motohashi, *West Australian Nut and Tree Crops Association 16*:48-59, West Australian Nut and Tree Crops Association, Australia (1991) ("Motohashi") in view of Hunder *et al., Arthritis & Rheumatism 17(6)*:955-963 (1974) ("Hunder"). Applicants respectfully traverse this rejection.

1. Legal Principles of Anticipation

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. M.P.E.P. 2131 (citing *Verdegaal Bros. v. Union Oil Co. of California,* 814 F.2d 628, 361 (Fed. Cir. 1987)). There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. *Scripps Clinic v. Genentech, Inc.,* 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991).

If the prior art does not necessarily function in accordance with, or does not include, the claimed limitations, it does not anticipate. *Mehl/Biophile International Corp. v. Milgraum*, 52 U.S.P.Q.2d 1303 (Fed. Cir. 1999). In other words, "a limitation or the entire invention is inherent and in the public domain if it is the 'natural result flowing from' the explicit disclosure of the prior art. *Schering Corporation v. Geneva Pharmaceuticals, Inc. and Novartis Corporation et al.*, 68 U.S.P.Q.2d 1760 (Fed. Cir. 2003).

2. *The Pending Claims Are Not Expressly or Inherently Anticipated by Motohashi*

The Examiner asserts:

> Motohashi teaches the use of *Actinidia arguta* in treatment of . . . rheumatoid arthritis. It is taken orally (see pages 48-49) . . . .
>
> Hunder et al. is solely used to show that there is an increase in IgE in patients with rheumatoid arthritis. Hence, treatment of rheumatoid arthritis would result in the decrease of IgE in patients with rheumatoid arthritis.

(Office Action at page 3).

Applicants respectfully disagree.

The present claims are not anticipated by Motohashi because the reference does not disclose reducing IgE production in a mammal in need thereof by orally administering an extract of *Actinidia arguta*. First, Motohashi does not expressly describe reducing IgE production in a mammal in need thereof. The reference also does not indicate that by treating humans afflicted with any of the listed indications with an extract of *Actinidia arguta*, IgE production would be reduced in humans in need thereof. In fact, the reference does not disclose any relationship between IgE production and the treatment of any indication. Therefore, the reference does not teach that the afflicted

humans were in need of a reduction in IgE production. Thus, Motohashi does not anticipate the present claims.

Second, Motohashi does not inherently describe reducing IgE production in a mammal in need thereof. The Examiner has not established that the reference necessarily includes the claimed limitation "wherein said [*Actinidia arguta*] extract is provided in an amount sufficient to reduce IgE production in said mammal." The Examiner has not shown that an oral extract of *Actinidia arguta* administered to humans for the treatment of any of the listed indications would *necessarily reduce IgE production in said mammal.* While the Examiner has attempted to establish a relationship between IgE production and rheumatoid arthritis ("RA") by referencing Hunder, the Examiner has conveniently ignored the second sentence in the Abstract of Hunder which states, ***"[n]o significant correlation was found between serum IgE concentration and the severity of RA*** nor was evidence found of the local production of IgE in synovial fluid in RA" (emphasis added). This statement alone indicates that the treatment of rheumatoid arthritis may not necessarily result in the reduction of IgE production.

Marcolongo, R. and Marsili, C. *Z. Immun.-Forsch. Bd. 148*:S 285-290 (1975) (enclosed herein as Exhibit A) ("Marcolongo") further supports the notion that the treatment of rheumatoid arthritis may not necessarily result in the reduction of IgE production. For example, the last line of the abstract of Marcolongo states, "[n]o correlation of . . . IgE values . . . with the activity and the duration of the rheumatoid arthritis was observed." Additionally, Marcolongo suggests that "the role and the importance of . . . IgE immunoglobulins may be excluded or considered to be negligible in . . . immunological response related to rheumatoid arthritis." Thus, no relationship

between the treatment of rheumatoid arthritis and the reduction of IgE production has been established. Additionally, no relationship between the oral treatment of rheumatoid arthritis with an extract of *Actinidia arguta* and the reduction of IgE production has been established by the Examiner. Thus, Motohashi does not inherently anticipate the present invention.

In view of the above, it is respectfully submitted that Motohashi does not describe each and every element of claim 146 either expressly or inherently. Therefore, claim 146, and any claim dependent on claim 146, is not anticipated by Motohashi.

In view of the above, it is respectfully requested that the rejection of claims 146, 150, 168-169, 233, 241, and 242 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

B. Second Rejection Under 35 U.S.C. § 102(b)

Claims 147, 150, 168-169, 233, 237, 241 and 242 are rejected under 35 U.S.C. § 102(b) as being anticipated by Motohashi in view of Myers *et al. Arthritis & Rheumatism 43(12)*:2687-2693 (2000) ("Myers"). Applicants respectfully traverse this rejection.

The present claims are not anticipated by Motohashi because the reference does not disclose decreasing the serum level of IgG1 and increasing the serum level of IgG2a in a mammal in need thereof by orally administering an extract of *Actinidia arguta*. First, Motohashi does not expressly describe decreasing the serum level of IgG1 and increasing the serum level of IgG2a in a mammal in need thereof. The reference also does not indicate that by treating humans afflicted with any of the listed indications with an extract of *Actinidia arguta*, serum IgG1 levels would be reduced and serum IgG2a levels would be increased in humans in need thereof. In fact, the reference does not

disclose any relationship between serum IgG1 and IgG2a levels and the treatment of any indication. Therefore, the reference does not teach that the humans were in need of serum IgG1 level decreases and serum IgG2a level increases. Thus, Motohashi does not anticipate the present claims.

Second, Motohashi does not inherently describe decreasing serum IgG1 levels or increasing serum IgG2a levels in a mammal in need thereof. The Examiner has not established that the reference necessarily includes the claimed limitation "wherein said [*Actinidia arguta*] extract is provided in an amount sufficient to decrease the serum level of IgG1 and increase the serum level of IgG2a in said mammal." The Examiner has not shown that an oral extract of *Actinidia arguta* administered to humans for the treatment of any of the listed indications would *necessarily result in a decrease in serum IgG1 levels and an increase in serum IgG2a levels in said mammal.* The Examiner has attempted to establish a direct relationship between serum IgG1 and IgG2a levels and rheumatoid arthritis ("RA") by referencing Myers. Specifically, the Examiner asserts that "Myers et al. is solely used to show treatment of arthritis would result in the decrease of IgG1 and increase of IgG2a in patients with arthritis." (Office Action at page 4). Applicants respectfully disagree and submit that the Examiner has actually mischaracterized Myers.

Myers made use of mice models that are susceptible to collagen-induced arthritis (CIA) with COX-1 or COX-2 gene deletions. Myers states that

> [c]ompared with wild-type controls, COX-1-/- mice exhibited a slight increase in IgG2a antibody production and a slight decrease in IgG1 antibodies. Conversely, COX-2-/- mice exhibited significantly depressed levels of both IgG1 and IgG2 antibodies (Table 1).

Myers at page 2690.

This statement alone suggests that an increase or decrease in the observed serum level of IgG1 and IgG2a immunoglobulins depends on the particular animal model being used to mimic arthritis and that the treatment of arthritis may not necessarily decrease serum IgG1 levels and increase serum IgG2a levels. The serum IgG1/IgG2a levels measured from the COX-1-/- mice suggest, at most, that rheumatoid arthritis treatment would require a reduction in IgG2a levels and an increase in IgG1 levels, not an increase in IgG2a levels and a reduction in IgG1 levels as is recited in the pending claims. Additionally, as Myers was the first publication to demonstrate the necessity of COX-2 expression in the pathogenesis of autoimmune arthritis, one of ordinary skill in the art would have been led to pursue rheumatoid arthritis treatments that increase serum levels of both IgG1 and IgG2a, and not decreases in the serum levels of IgG1 and increases in serum levels of IgG2a as is recited in the pending claims. This is particularly the case, as it is well known that the COX-1 enzyme has homeostatic functions, the COX-2 enzyme "functions as the mediator of inflammation ... [and the] overexpression [of the COX-2 gene] has been demonstrated ... in synovial tissues of patients with RA." Myers at page 2692.

Thus, no relationship between the treatment of arthritis, let alone rheumatoid arthritis, and decreases in serum IgG1 levels and increases in serum IgG2a levels has been established. Additionally, no relationship between the oral treatment of rheumatoid arthritis with an extract of *Actinidia arguta* and decreases in serum IgG1 levels and increases in serum IgG2a levels has been established by the Examiner. Thus, Motohashi does not inherently anticipate the present invention.

In view of the above, it is respectfully submitted that Motohashi does not describe each and every element of claim 147 either expressly or inherently. Therefore, claim 147 or any claim dependent on claim 147 is not anticipated by Motohashi.

In view of the above, it is respectfully requested that the rejection of claims 147, 150, 168-169, 233, 237, 241, and 242 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

C. Third Rejection Under 35 U.S.C. § 102(b)

Claims 148, 150, 158, 168-169, 233, 237, 241, and 242 are rejected under 35 U.S.C. § 102(b) as being anticipated by Motohashi in view of *Yudoh et al. Arthritis & Rheumatism 43(3)*:617-627 (2000) ("Yudoh"). Applicants respectfully traverse this rejection.

The present claims are not anticipated by Motohashi because the reference does not disclose simultaneously decreasing Th2 serum cytokines and increasing Th1 serum cytokines in a mammal in need thereof by orally administering an extract of *Actinidia arguta*. First, Motohashi does not expressly describe simultaneously decreasing Th2 serum cytokines and increasing Th1 serum cytokines in a mammal in need thereof. The reference also does not indicate that by treating humans afflicted with any of the listed indications with an extract of *Actinidia arguta*, serum Th2 cytokines would be reduced and serum Th1 cytokines would be increased simultaneously in humans in need thereof. In fact, the reference does not disclose any relationship between serum Th2 and Th1 cytokines and the treatment of any indication. Therefore, the reference does not teach that the humans were in need of serum Th1 cytokine increases and serum Th2 cytokine decreases. Thus, Motohashi does not anticipate the present claims.

Second, Motohashi does not inherently describe simultaneously decreasing Th2 serum cytokines and increasing Th1 serum cytokines in a mammal in need thereof. The Examiner has not established that the reference necessarily includes the claimed limitation "wherein said [*Actinidia arguta*] extract is provided in an amount sufficient to simultaneously decrease serum Th2 cytokines and increase Th1 cytokines in said mammal." The Examiner has not shown that an oral extract of *Actinidia arguta* administered to humans for the treatment of any of the listed indications would *necessarily result in the simultaneous decrease Th2 serum cytokines and increase Th1 serum cytokines in said mammal.* While the Examiner has attempted to establish a direct relationship between serum Th1 and Th2 cytokines and rheumatoid arthritis ("RA") by referencing Yudoh, the Examiner has actually mischaracterized Yudoh. The Examiner asserts as follows:

> Yudoh et al. teaches in rheumatoid arthritis, reduced expression of the CD41 T cell subset producing IL-10 but not IL-2 and IL-4 may be responsible for the dominance of Th1 over Th2 cells at sites of inflamed synovium and in the peripheral blood....Yudoh et al. is solely used to show treatment of arthritis would result in the decrease of TH2 and increase of TH1 in patients with rheumatoid arthritis.

(Office Action at page 5).

Applicants respectfully disagree.

Yudoh states that "[n]o significant correlations were observed between the Th1:Th2 ratio in the peripheral blood and disease severity (disease activity score and parameters of inflammation) in RA patients." Yudoh at page 624. This statement alone suggests that the treatment of arthritis may not necessarily result in the simultaneous increase of serum Th1 cytokines and decrease of serum Th2 cytokines. Yudoh also states on page 624 that their findings "suggest that decreased expression of CD4+ T cell

subset producing IL-10 but not IL-4 and IL-2 may be responsible for the dominance of Th1 cells over Th2 cells in the peripheral blood and in synovial tissue of patients with RA." This statement suggests, at most, that rheumatoid arthritis treatment would require a reduction in serum Th1 cytokines and an increase in serum Th2 cytokines, not an increase in serum Th1 cytokines and a reduction in serum Th2 cytokines as is recited in the pending claims.

Thus, no relationship between the treatment of rheumatoid arthritis and simultaneous decreases in serum Th2 cytokines and increases in serum Th1 cytokines has been established. Additionally, no relationship between the oral treatment of rheumatoid arthritis with an extract of *Actinidia arguta* and simultaneous decreases in serum Th2 cytokines and increases in serum Th1 cytokines has been established by the Examiner. Thus, Motohashi does not inherently anticipate the present invention.

In view of the above, it is respectfully submitted that Motohashi does not describe each and every element of claim 148 either expressly or inherently. Therefore, claim 148 or any claim dependent on claim 148 is not anticipated by Motohashi.

In view of the above, it is respectfully requested that the rejection of claims 148, 150, 158, 168-169, 233, 237, 241, and 242 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

D. Fourth Rejection Under 35 U.S.C. § 102(b)

Claims 176, 180, 197-198, 233, 237, 241, and 242 are rejected under 35 U.S.C. § 102(b) as being anticipated by Motohashi in view of Permin *et al. Allergy 36(6)*:435-436 (1981) ("Permin"). Applicants respectfully traverse this rejection.

The present claims are not anticipated by Motohashi because the reference does not disclose decreasing histamine release in a mammal in need thereof by orally

administering an extract of *Actinidia arguta*. First, Motohashi does not expressly describe decreasing histamine release in a mammal in need thereof. The reference also does not indicate that by treating humans afflicted with any of the listed indications with an extract of *Actinidia arguta*, histamine release would be decreased in humans in need thereof. In fact, the reference does not disclose any relationship between histamine release and the treatment of any indication. Therefore, the reference does not teach that the humans were in need of histamine release reduction. Thus, Motohashi does not anticipate the present claims.

Second, Motohashi does not inherently describe decreasing histamine release in a mammal in need thereof. The Examiner has not established that the reference necessarily includes the claimed limitation "administering an extract of *Actinidia arguta* to said mammal in an amount sufficient to decrease histamine release in said mammal." The Examiner has not shown that an oral extract of *Actinidia arguta* administered to humans for the treatment of any of the listed indications would *necessarily result in a decrease in histamine release in said mammal*. The Examiner has attempted to establish a direct relationship between histamine release and rheumatoid arthritis ("RA") by referencing Permin. The Examiner asserts as follows:

> Permin et al. is solely used to show a role of histamine in rheumatoid arthritis is also supported by the findings of clinical improvement during treatment with H_1 and H_2 antihistamines in six of 12 patients with rheumatoid arthritis in active phase, whereas four showed definite deterioration. Hence, treatment of rheumatoid arthritis would result in the decrease of histamine in patients with rheumatoid arthritis.

(Office Action at page 6).

Applicants respectfully disagree. The Examiner has completely glossed over the fact that Permin admitted to four of the 12 patients with rheumatoid arthritis in active

phase showing "definite deterioration" after being administered antihistamines. Additionally, two of those same 12 patients did not show clinical improvement with antihistamine treatment at all. These facts alone suggest that the treatment of arthritis may not necessarily result in the reduction of histamine release. Additionally, it is known in the art that RA patients display significantly lower levels of histamine in circulation as compared with healthy individuals. *See* Adlesic, M. *et al., Scand. J. Immunol. 65*:530-537 (2007) (enclosed herein as Exhibit B). Thus, one of ordinary skill in the art would have been motivated to increase histamine release to treat rheumatoid arthritis based on the teachings of Adlesic instead of decrease histamine release as is required by the pending claims.

Thus, no relationship between the treatment of rheumatoid arthritis and histamine release reduction has been established. Additionally, no relationship between the oral treatment of rheumatoid arthritis with an extract of *Actinidia arguta* and histamine release reduction has been established by the Examiner. Thus, Motohashi does not inherently anticipate the present invention.

In view of the above, it is respectfully submitted that Motohashi does not describe each and every element of claim 176 either expressly or inherently. Therefore, claim 176 or any claim dependent on claim 176 is not anticipated by Motohashi.

In view of the above, it is respectfully requested that the rejection of claims 176, 180, 197-198, 233, 237, 241, and 242 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

E. Fifth Rejection Under 35 U.S.C. § 102(b)

Claims 177, 197-198, 233, 237, 241, and 242 are rejected under 35 U.S.C. § 102(b) as being anticipated by Motohashi in view of McGonagle *et al. Arthritis &*

Rheumatism 42(8):1706-1711 (1999) ("McGonagle"). Applicants respectfully traverse this rejection.

The present claims are not anticipated by Motohashi because the reference does not disclose decreasing edema in a mammal in need thereof by orally administering an extract of *Actinidia arguta*. First, Motohashi does not expressly describe decreasing edema in a mammal in need thereof. The reference also does not indicate that by treating humans afflicted with any of the listed indications with an extract of *Actinidia arguta*, edema would be decreased in humans in need thereof. In fact, the reference does not disclose any relationship between edema and the treatment of any indication. Therefore, the reference does not teach that the humans were in need of edema reduction. Thus, Motohashi does not anticipate the present claims.

Second, Motohashi does not inherently describe decreasing edema in a mammal in need thereof. The Examiner has not established that the reference necessarily includes the claimed limitation "administering an extract of *Actinidia arguta* to said mammal in an amount sufficient to decrease edema in said mammal." The Examiner has not shown that an oral extract of *Actinidia arguta* administered to humans for the treatment of any of the listed indications would *necessarily decrease edema in said mammal*. The Examiner has attempted to establish a direct relationship between edema and rheumatoid arthritis ("RA") by referencing McGonagle. The Examiner asserts as follows:

> McGonagle et al. is solely used to show metacarpophalangeal joint bone edema is present in the majority of patients with RA at presentation, but is seen only occasionally in normal control subjects.... treatment of rheumatoid arthritis would result in the decrease of edema in patients with rheumatoid arthritis.

(Office Action at pages 6-7).

Applicants respectfully disagree.

As stated above, if the prior art does not necessarily function in accordance with, or does not include, the claimed limitations, it does not anticipate. *Mehl/Biophile International Corp. v. Milgraum*, 52 U.S.P.Q.2d 1303 (Fed. Cir. 1999).

McGonagle observed that only 68% of RA patients exhibited bone edema. 32% of the RA patients did not exhibit bone edema. *See* McGonagle Abstract. Thus, bone edema is not necessarily associated with RA. Additionally, McGonagle does not disclose any RA treatment method, let alone an RA treatment method that will necessarily reduce edema. Thus, a patient being treated for RA might not have edema and, therefore, would not experience a reduction in edema as is required by the claims. These facts alone suggest that the treatment of arthritis may not necessarily result in the reduction of edema.

Thus, no relationship between the treatment of rheumatoid arthritis and edema reduction has been established. Additionally, no relationship between the oral treatment of rheumatoid arthritis with an extract of *Actinidia arguta* and edema reduction has been established by the Examiner. Thus, Motohashi does not inherently anticipate the present invention.

In view of the above, it is respectfully submitted that Motohashi does not describe each and every element of claim 177 either expressly or inherently. Therefore, claim 177 or any claim dependent on claim 177 is not anticipated by Motohashi.

In view of the above, it is respectfully requested that the rejection of claims 177, 197-198, 233, 237, 241, and 242 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

F. First Rejection Under 35 U.S.C. § 103(a)

Claims 155-157, 170-171, 173, 185-187, 199-200, 239, and 243-244 are rejected under 35 U.S.C.§ 103(a) as being unpatentable over Motohashi as applied to claims 146-148, 150, 158, 168-169, 176-177, 180, 197-198, 233, 237, 241, and 242. Applicants respectfully traverse this rejection.

In order to establish a *prima facie* case of obviousness, (1) there must be some reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; (2) there must be a reasonable expectation of success; and (3) the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP § 2143.

As discussed above, Motohashi does not expressly or inherently teach or suggest all the claim limitations of the pending claims. In particular, the cited reference does not teach expressly or inherently methods of reducing IgE production, decreasing the serum level of IgG1 and increasing the serum level of IgG2a, decreasing Th2 serum cytokines and increasing Th1 serum cytokines, reducing histamine release or decreasing edema via the oral administration of an extract of *Actinidia arguta*. Thus, the Examiner has failed to make a *prima facie* case of obviousness. Applicants respectfully request that the rejection be reconsidered and withdrawn.

G. Second Rejection Under 35 U.S.C. § 103(a)

Claims 172, 174, 201, and 203 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Motohashi as applied to claims 146-148, 150, 155-158, 168-171, 173, 176-177, 180, 185-187, 197-200, 202, 233, 237, 239, and 241-244 in view of U.S. Patent No. 6,630,163 ("Murad"). Applicants respectfully traverse this rejection.

As discussed above, Motohashi does not expressly or inherently teach or suggest all the claim limitations of the pending claims. In particular, the cited reference does not teach expressly or inherently methods of reducing IgE production, decreasing the serum level of IgG1 and increasing the serum level of IgG2a, decreasing Th2 serum cytokines and increasing Th1 serum cytokines, reducing histamine release, or decreasing edema via the oral administration of an extract of *Actinidia arguta*. Murad does not teach expressly or inherently methods of reducing IgE production, decreasing the serum level of IgG1 and increasing the serum level of IgG2a, decreasing Th2 serum cytokines and increasing Th1 serum cytokines, reducing histamine release, or decreasing edema via the oral administration of an extract of *Actinidia arguta.* Accordingly, Murad fails to cure the deficiencies of Motohashi. The combination of references fails to teach or suggest all of the claim limitations of the pending claims. Thus, the Examiner has failed to make a *prima facie* case of obviousness. Applicants respectfully request that the rejection be reconsidered and withdrawn.

H. Third Rejection Under 35 U.S.C. § 103(a)

Claims 151-153, 159-167, 181-183, 188-196, 238, and 240 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Motohashi as applied to claims 146-148, 150, 155-158, 168-171, 173, 176-177, 180, 185-187, 197-200, 202, 233, 237, 239, and 241-244 in view of JP 02202808 A ("Tsuboi"). Applicants respectfully traverse this rejection.

As discussed above, Motohashi does not expressly or inherently teach or suggest all the claim limitations of the pending claims. In particular, the cited reference does not teach expressly or inherently methods of reducing IgE production, decreasing the serum level of IgG1 and increasing the serum level of IgG2a, decreasing Th2 serum cytokines

and increasing Th1 serum cytokines, reducing histamine release, or decreasing edema via the oral administration of an extract of *Actinidia arguta*. Tsuboi does not teach expressly or inherently methods of reducing IgE production, decreasing the serum level of IgG1 and increasing the serum level of IgG2a, decreasing Th2 serum cytokines and increasing Th1 serum cytokines, reducing histamine release, or decreasing edema via the oral administration of an extract of *Actinidia arguta*. Accordingly, Tsuboi fails to cure the deficiencies of Motohashi. The combination of references fails to teach or suggest all of the claim limitations of the pending claims. Thus, the Examiner has failed to make a *prima facie* case of obviousness. Applicants respectfully request that the rejection be reconsidered and withdrawn.

I. Fourth Rejection Under 35 U.S.C. § 103(a)

Claims 154 and 184 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Motohashi and Tsuboi, as applied to claims 146-148, 150-153, 155-171, 173, 176-177, 180-183, 185-200, 202, 233, and 237-244 and in view of U.S. Publ. No. 20020054923 A1 ("Suzuki"). Applicants respectfully traverse this rejection.

As discussed above, Motohashi does not expressly or inherently teach or suggest all the claim limitations of the pending claims. In particular, the cited reference does not teach expressly or inherently methods of reducing IgE production, decreasing the serum level of IgG1 and increasing the serum level of IgG2a, decreasing Th2 serum cytokines and increasing Th1 serum cytokines, reducing histamine release, or decreasing edema via the oral administration of an extract of *Actinidia arguta*. Neither Tsuboi nor Suzuki teach expressly or inherently methods of reducing IgE production, decreasing the serum level of IgG1 and increasing the serum level of IgG2a, decreasing Th2 serum cytokines and increasing Th1 serum cytokines, reducing histamine release, or decreasing edema via

the oral administration of an extract of *Actinidia arguta*. Accordingly, Tsuboi and Suzuki fail to cure the deficiencies of Motohashi. The combination of references fails to teach or suggest all of the claim limitations of the pending claims. Thus, the Examiner has failed to make a *prima facie* case of obviousness. Applicants respectfully request that the rejection be reconsidered and withdrawn.

J. Double-Patenting Rejections

Claims 146-148, 150-174, 176, 177, 180-203, 233, and 237-244 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 130-132, 134-142, 145, 146, and 149-157 of U.S. Appl. No. 11/522,511. Applicants respectfully request that this rejection be held in abeyance until otherwise allowable claims are identified, at which time Applicants will consider filing a Terminal Disclaimer.

Claims 146-148, 150-174, 176, 177, 180-203, 233, and 237-244 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-30, 34-37, 42-44, 55, 58, 60, 63, 65, and 67 of U.S. Appl. No. 12/180,723. Applicants respectfully request that this rejection be held in abeyance until otherwise allowable claims are identified, at which time Applicants will consider filing a Terminal Disclaimer.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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